(12) AUSTRALIAN PATENT ABSTRACT

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GARMENT HANGER (54)

RAINSFORDS PTY. LIMITED (71)

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(74) CA

Claim (57)

> A garment hanger comprising a support arm having a hook 1. member centrally positioned along the length of said arm and extending from one edge thereof, the arm having garment clamping means located at each end thereof and extending from the opposite edge of the arm, the clamping means comprising jaw members connected by a hinge member whereby at least one jaw at each end of said arm is movable relative to the other to open and close the jaws, a clip member positioned on each set of jaws and moveable between an open and closed position to permit the jaws to be opened and closed, the support arm, hook jaws and hinge being formed integrally in a moulding operation and said support arm having at least one longitudinally extending reinforcing member embedded therein.

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COMPLETE SPECIFICATION

(ORIGINAL)

FOR OFFICE USE

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TO BE COMPLETED BY APPLICANT

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Complete Specification for the invention entitled:

POLYPROPYLENE COAT HANGER

The following statement is a full description of this invention, including the best method of performing it known to me:-

This invention relates to improvements in garment hangers which are manufactured from flexible material e.g. polypropylene.

Hangers of this type include a support arm with a centrally positioned hook extending from one edge thereof, garment clamping means are located at each end of the arm and extend downwardly from the other edge of the arm. The clamping means comprise jaw members connected by a hinge whereby one jaw member may be moved relative to the other to open and close the jaws and a clip member moveable between an open and closed position as provided to control the position of the jaws.

The support arm, hook, jaws and hinge are formed in one piece in a moulding operation and in order to provide for the hinging action hangers of this type have to be manufactured from a flexible plastics material e.g. polypropylene. While this material is extremely suitable for providing the mentioned hinging action it is highly flexible and experience has shown that such hangers distort even under moderately heavy loads. In consequence there has been a need for a hanger of the type referred to and which is so constructed that it will not distort under heavy loads.

The invention comprises a garment hanger comprising a support arm having a hook member centrally positioned along the length of said arm and extending from one edge thereof, the arm having garment clamping means located at each end thereof and extending from the opposite edge of the arm, the clamping means comprising jaw members connected by a hinge

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member whereby at least one jaw at each end of said arm is moveable relative to the other to open and close the jaws and a clip member positioned on each set of jaws and moveable between an open and closed position to permit the jaws to be opened and closed, said support arm, hook, jaws and hinge being formed integrally in a moulding operation and said support arm having at least one longitudinally extending reinforcing member embedded therein and preferably spaced from the edges of said arm.

An embodiment of the invention will now be described with reference to the accompanying drawings in which:

Figure 1 is a side elevation;

Figure 2 is a view of the hanger in the direction of the arrow II in Figure 1.

Figure 3 is a perspective view of one end of the hanger illustrating a clamping member; and

Figure 4 is an end view in the direction of the arrow IV in Figure 3.

Referring now to the drawings the hanger includes a support arm 1 which is "I" shape in cross section and includes spaced flange members 2 and 3 connected by a web 4. A hook member 5 provided with a strengthening flange 6 extends upwardly from the flange 2.

Each end of the arm 1 is provided with clamping members designated by the reference 7. This member has three components namely a fixed jaw 8, a moveable jaw 9 and a "u" shaped spring clip 10.

The fixed jaw is integral with the arm 1 as illustrated

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in Fig. 1. Each end of the arm is cranked outwardly as at 11 from the plane of the arm to form the fixed jaw 8. The inner face of the jaw is provided with rows of dimples 12 and the back of the jaw 8 has a vertical channel 13 therein which has a keeper bar 14 extending across the top end thereof.

The moveable jaw 9 is complimentary in shape to the fixed jaw 8 and is connected to the fixed jaw by a hinge 15. The inner face of jaw 9 is provided with rows of dimples 16 which correspond with the rows of dimples 12 on the fixed jaw 8.

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The back of the fixed jaw 8 has spaced raised quadrilateral shaped dimples 17 and 18, the sides 19 and 20 thereof define a channel 21 to receive the limb 22 of the spring clip 10. The other limb 23 of this clip is received in the channel 13. The inner end of the limb 22 is formed into an inwardly directed catch 24 which is adapted to register with a protuberence 25 in the channel 21. The other limb 23 of the clip is provided with a raised catch member 26 which engages with the keeper bar 14 to normally prevent the clip 10 from being removed from the hanger. The clip is however moveable between two positions namely an upper position which permits the moveable jaw 9 to be opened and a lower position where the moveable jaw is held closed against the fixed jaw 8. When the moveable jaws at each end of the hanger are opened a portion of a garmet is inserted between the jaws, the clips are then moved to the closed position. This causes the garment to be grasped and held between the jaws and the dimples on the jaws prevent the garment from accidently sliding betweent the jaws.

Postioned within the arm 1 is a reinforcing member 27 which may be a bar or rod. In the embodiment being described the reinforcing member comprises a steel rod. The rod is inserted in the mould during the moulding of the hanger and is thereby embedded in the web 4. Two openings 28 and 29 are left in the hanger through which pass the holding means to hold the member 28 centrally in the mould. The hanger is formed with two reinforcing mouldings 30 and 31 which connect the flanges 2 and 3 and thereby imparting more rigidity to the hanger.

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The claims defining the invention are as follows:

- 1. A garment hanger comprising a support arm having a hook member centrally positioned along the length of said arm and extending from one edge thereof, the arm having garment clamping means located at each end thereof and extending from the opposite edge of the arm, the clamping means comprising jaw members connected by a hinge member whereby at least one jaw at each end of said arm is movable relative to the other to open and close the jaws, a clip member positioned on each set of jaws and moveable between an open and closed position to permit the jaws to be opened and closed, the support arm, hook jaws and hinge being formed integrally in a moulding operation and said support arm having at least one longitudinally extending reinforcing member embedded therein.
- 2. A garment hanger as claimed in claim 1, wherein said reinforcing member is spaced from the edges of said arm.
- 3. A garment hanger as claimed in claim 2, wherein two spaced openings are provided in the arm through which pass holding means to hold the reinforcing member centrally in the mould during the formation of the hanger.
- 4. A garment hanger as claimed in claim 3, wherein spaced transverse reinforcing members extend across said arm.
- 5. A garment hanger as claimed in claim 1, wherein each end of the arm is cranked out of a plane of said arm to form a fixed jaw integral with said arm, a moveable jaw complimentary in shape to said fixed jaw connected by a hinge to said fixed jaw, the inner faces of said jaws being provided with rows of dimples to facilitate the gripping of a

garment positioned between said jaws.

- 6. A garment hanger as claimed in claim 5, wherein the outer faces of each jaw are provided with channels, the clip member comprises a U-shaped member, the limbs of which seat in the respective channels, one limb of said clip member having a catch member formed thereon which engages a keeper bar extending across the channel in said fixed jaw to normally prevent the clip from being removed from the hanger, the other limb of said clip having a catch member thereon which engages with a protuberence in the channel in said moveable jaw to retain the jaws in closed condition on manipulation of said clip.
- 7. A garment hanger substantially as hereinbefore described with reference to the accompanying drawings.

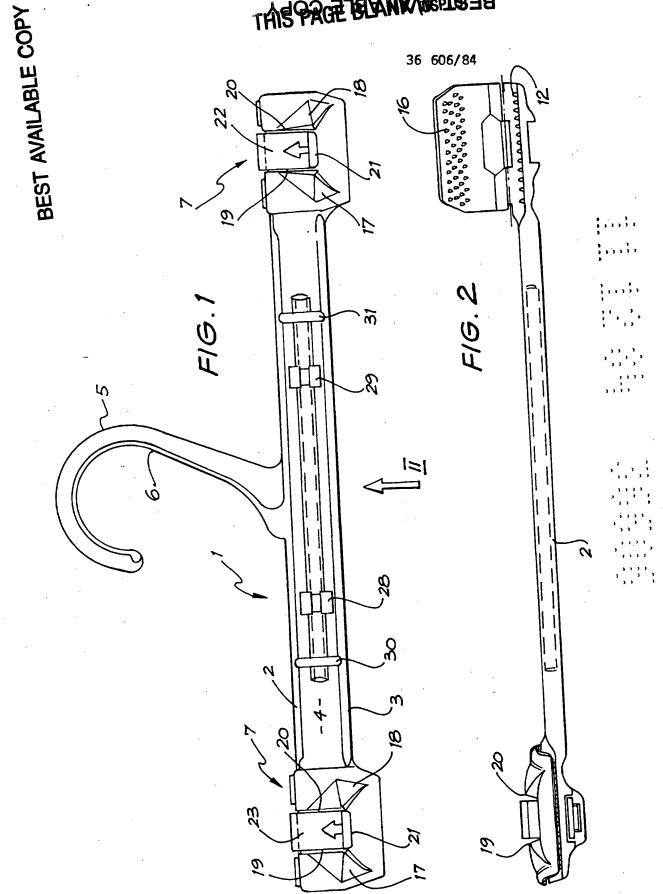
DATED this 10th day of December, 1984.

RAINSFORDS PTY. LIMITED,

By Its Patent Attorneys,

ARTHUR S. CAVE & CO.

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